

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

see form PCT/ISA/220

Date of mailing
(day/month/year) see from PCT/ISA/210 (page 2)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION

See paragraph 2 below

International application No.
PCT/DE2004/000603

International filing date (day/month/year)
3/24/2004

Priority date (day/month/year)
4/11/2003

International Patent Classification (IPC) or both national classification and IPC
B08B3/02

Applicant
ROBERT BOSCH GMBH

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/
European Patent Office Rijswijk

Authorized officer
Plontz, N

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT?DE2004/000603

Box No. 1 Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
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Box No. II Priority

1. ☒ The following document has not yet been furnished:

☒ copy of the earlier application whose priority has been claimed (Rules 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rules 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

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International application No.
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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2,4,5,7-12	YES
	Claims	1,3,6	NO
Inventive step (IS)	Claims	7-12	YES
	Claims	2-6	NO
Industrial applicability (IA)	Claims	1-12	YES
	Claims		NO

2. Citations and explanations:

see supplementary page

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see supplementary page

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see supplementary page

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY
(SUPPLEMENTARY PAGE)

International File No. PCT/DE2004/000603

Re Item V

1. Reference is made to the following documents in the present opinion:
D1: FR 2 704 780 A (VEIL JEAN PIERRE) November 10, 1994
D2: US 2003/010852 A1 (SCHUMER JOHN E) January 16, 2003
D3: US-B-6 258 177 (EASTMAN JR ARNOLD B ET AL) July 10, 2001
2. INDEPENDENT CLAIM 1
- 2.1 The present application does not meet the requirements of Article 33(1) PCT because the object of Claim 1 is not novel as defined by Article 33(2) PCT.

Document D1 describes (see abstract, figures, and page 4, line 20 - page 5, line 30):

A low-pressure spray module for spray cleaning components including a receiver tank (2) for holding a flushing medium which on the inlet side can be pressurized using compressed air from a compressed air source and on the outlet side is connected to a spray lance (21) to be used for the pressurized spraying out of a component using the flushing medium, and a collection tank (28), which is positioned for collecting the particle-containing flushing medium after the spray cleaning of the component, and in the outflow side of which a filter (30) is installed.

3. DEPENDENT CLAIMS 2 through 6

Claims 2 through 6 contain no features, which in combination with the features of any claim to which they refer, meet the requirements of the PCT with regard to novelty or inventive step:

- An exchangeable spray lance on the receiver tank is already known from D3 (see column 2, line 26 - line 32)
- A valve according to Claim 3 is already known from D1 (see page 4, line 30)
- A filter and valves according to Claims 4, 5 and 6 are already known from D1 (see page 5, lines 7-9) in combination with D2 (see paragraph 40).

4 INDEPENDENT CLAIM 7 AND DEPENDENT CLAIMS

4.1 Document D1 is seen as the most proximate related art. It describes (the references in brackets refer to this document):

A method for the low-pressure spray cleaning and residual contaminant analysis of components including the following steps:

providing a receiver tank filled with a flushing medium (2);

pressurizing the receiver tank (2) on the inlet side (1) using compressed air from a compressed air source;

conducting the pressurized flushing medium from the receiver tank (2) to a spray lance (21);

spray cleaning the component by spraying the flushing medium from the spray lance (21);

collecting the particle-containing flushing medium after the spray cleaning in a collection tank (28);

providing an analysis filter (30) situated on an outflow side of the collection tank (28),

from which the object of independent Claim 7 differs in that:

the particle-containing flushing medium flows through the filter;

the particles are filtered out of the flushing medium using the analysis filter and a residual contamination analysis is carried out using the particles filtered out by the analysis filter.

The object of Claim 7 is thus novel (Article 33(2)PCT).

The object to be achieved by the present invention can accordingly be seen as improving the internal cleaning of poorly accessible areas (see page 2, lines 8 and 9).

The achievement of this object described in Claim 7 of the present application is based on an inventive step for the following reasons (Article 33(3) PCT).

- 4.2 Claims 8 through 12 are dependent on Claim 7 and thus also meet the requirements of the PCT with respect to novelty and inventive step.

Re Item VII

Certain defects in the international application

1. Contrary to the requirements of Rule 5.1 a) ii) PCT, the description refers neither to the relevant related art described in Document D1 nor to that document.
2. Independent Claims 1 and 7 are not composed in the two-part form as required by Rule 6.3 b) PCT. In the present case, however, the division into two parts appears to be appropriate. Consequently, the features known in conjunction with one another from the related art

(Document D1) belong in the preamble (Rule 6.3 b) i) PCT) and the remaining features belong in the characterizing portion (Rule 6.3 b) ii) PCT).

Re Item VIII

Certain observations on the international application

For the following reasons, the application does not meet the requirements of Article 6 PCT.

1. As shown below, the feature "that it filters out the particles from the flushing medium drawn off using a vacuum pump and preserves them for later analysis" in device claim 1 refers to a method for using the device and not to the definition of the device based on its technical features. The intended limitations are not clearly derived from the claim, contrary to the requirements of Article 6 PCT.
2. Claim 1 is not clear because the object of the application for protection is not clearly defined. The functional details that follow do not enable a person skilled in the art to determine which technical features are necessary to implement the function of the "analysis filter."
3. Claim 8 is vague and unclear and leaves the reader in the dark concerning the significance of its technical features in question. As a result, the definition of the object of this claim is unclear.